

WHAT IS CLAIMED IS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-10 (cancelled)

11. (currently amended) ~~The vacuum arc vapor deposition method according to claim 9, further comprising:~~ A vacuum arc vapor deposition method comprising;

producing a plasma containing a cathode material by vaporizing a cathode by vacuum arc discharge;

feeding a coil current for generating a magnetic field to a magnetic coil to deflect or converge said plasma thus produced and guide said plasma to the vicinity of a substrate; and

reversing a flowing direction of the coil current fed to the magnetic coil;

measuring a thickness of a film formed by said plasma at a plurality of points in the vicinity of the substrate,

wherein the flowing direction of the coil current is reversed when a difference between film thickness values thus measured exceeds a predetermined value.

12. (currently amended) ~~The vacuum arc vapor deposition method according to claim 9, further comprising~~ A vacuum arc vapor deposition method comprising;

producing a plasma containing a cathode material by vaporizing a cathode by vacuum arc discharge;

feeding a coil current for generating a magnetic field to a magnetic coil to deflect
or converge said plasma thus produced and guide said plasma to the vicinity of a
substrate; and

reversing a flowing direction of the coil current fed to the magnetic coil;
measuring ion currents at a plurality of points in the vicinity of the substrate,
wherein the flowing direction of the coil current is reversed when a difference
between current values thus measured exceeds a predetermined value.